DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

CERTIFICATE OF WAIVER OR AUTHORIZATION

ISSUED TO
Public Agency – City of Wilmington Police Department Part 91

City of Wilmington Police Department
615 Bess Street
Wilmington, North Carolina 28401

This certificate is issued for the operations specifically described hereinafter. No person shall conduct any operation pursuant to the authority of this certificate except in accordance with the standard and special provisions contained in this certificate, and such other requirements of the Federal Aviation Regulations not specifically waived by this certificate.

OPERATIONS AUTHORIZED

Operation of small Unmanned Aircraft System(s) (sUAS) weighing less than 55 pounds and operating at speeds of less than 87 kts. (100 mph) in Class G airspace at or below 400 feet Above Ground Level (AGL) and in Class D and E airspace in accordance with UAS Facility Map (UASFM) altitudes within the confines of New Hanover County, North Carolina under the jurisdiction of Wilmington International Airport Traffic Control Tower (ILM ATCT) and Washington Air Route Traffic Control Center (ZDC ARTCC). See Special Provisions and Attachments.

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

N/A

STANDARD PROVISIONS

1. A copy of the application made for this certificate shall be attached and become a part hereof.
2. This certificate shall be presented for inspection upon the request of any authorized representative of the Federal Aviation Administration, or of any State or municipal official charged with the duty of enforcing local laws or regulations.
3. The holder of this certificate shall be responsible for the strict observance of the terms and provisions contained herein.
4. This certificate is nontransferable.

Note-This certificate constitutes a waiver of those Federal rules or regulations specifically referred to above. It does not constitute a waiver of any State law or local ordinance.

SPECIAL PROVISIONS

Special Provisions Nos. A thru G, inclusive, and Air Traffic Control Special Provisions are set forth on the reverse side hereof.

The certificate is effective from August 30, 2024, to August 29, 2026, inclusive, and is subject to cancellation at any time upon notice by the Administrator or his/her authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

BRANDON K SMOTHERMAN
Digitally signed by BRANDON K SMOTHERMAN
Date: 2024.08.15 07:02:09 -04'00'

FAA Eastern Service Center
(Region)

For Gregory R. Garmon
(Signature)

Tactical Operations Team Manager, AJV-E23
(Title)

FAA Form 7711-1 (7-74)

Purpose: To prescribe UAS operating requirements in the National Airspace System (NAS) for the purpose of Public Aircraft Operations. The holder of this COA will be referred herein as the "Proponent".

Public Aircraft

1. A public aircraft operation is determined by statutes, 49 USC §40102(a) (41) and §40125.
2. All public aircraft flights conducted under a COA must comply with the terms of the statute.
3. All flights must be conducted per the declarations submitted in the application, and as specified in the following Special Provisions.
4. This COA provides an alternate means of complying with 14 CFR §91.113(b) for unmanned aircraft operations.
5. All operations will be conducted in compliance with Title 14 CFR §91 and the conditions of the authorization issued herein. If the operator cannot adhere to any of these requirements, a separate FAA Form 7711-2 waiver application may be required.

SPECIAL PROVISIONS

A. **General.**

1. All personnel connected with the UAS operation must read and comply with the contents of this authorization and its provisions.
2. A copy of the COA including the special limitations must be immediately available to all operational personnel at each operating location whenever UAS operations are conducted.
3. This authorization may be canceled at any time by the Administrator, the person authorized to grant the authorization, or the representative designated to monitor a specific operation. As a general rule, this authorization may be canceled when it is no longer required, there is an abuse of its provisions, or when unforeseen safety factors develop. Failure to comply with the authorization is cause for cancellation. The proponent will receive a written notice of cancellation.
4. During the time this COA is approved and active, a site safety evaluation/visit may be accomplished to ensure COA compliance, assess any adverse impact on ATC or airspace, and ensure this COA is not burdensome or ineffective. Deviations, accidents/incidents/mishaps, complaints, etc., will prompt a COA review or site visit to address the issue. Refusal to allow a site safety evaluation/visit may result in cancellation of the COA.

   Note: This section does not pertain to agencies that have other existing agreements in place with the FAA.
5. (If non-Federal entity) Radiofrequency spectrum authorization is independent of the COA process and requires the proponent to obtain Federal Communications Commission (FCC) equipment certification (47 CFR Part 2, Subpart J and 47 CFR Part 87, Subpart D) and frequency licenses (47 CFR Part 87) in the Aeronautical Radionavigation, Aeronautical Mobile (Route), or Aeronautical Mobile Services, as appropriate, for the control link, ATC radios, transponders, detect and avoid systems, and navigation systems used to support this COA. For systems operating exclusively below 400 feet, and within visual line of sight, the control link equipment may be licensed under 47 CFR Part 15 (Radio Frequency Devices). Equipment licensed under 47 CFR Part 5 (Experimental) does not provide the protection necessary for NAS operations.

   OR

   (If Federal Entity) Radiofrequency spectrum authorization is independent of the COA process and requires the proponent to obtain equipment certification and frequency assignments (licenses) in the Aeronautical Radionavigation, Aeronautical Mobile (Route), or Aeronautical Mobile Services, as appropriate, from the National Telecommunications and Information Administration (NTIA) for all radiofrequency devices, including the control link, ATC radios, transponders, detect and avoid systems, and navigation systems, used to support this COA (47 CFR Part 300).

B. **Operations.**

1. The UA must be operated within visual line of sight (VLOS) of the Pilot in Command (PIC) and the person manipulating the flight controls at all times unless otherwise specified in a

Special Provision. This requires the PIC to be able to use human vision unaided by any device other than corrective lenses. Although the remote PIC and person manipulating the controls must maintain the capability to see the UA, using one or more Visual Observers (VO) allows the remote PIC and person manipulating the controls to conduct other mission-critical duties (such as checking displays) while still ensuring situational awareness of the UA.

2. Must yield right of way to other aircraft, manned or unmanned.
3. First-person view camera cannot satisfy "see-and-avoid" requirement but can be used as long as the visual requirement is satisfied in other ways.
4. Small unmanned aircraft means an unmanned aircraft weighing less than 55 pounds on takeoff, including everything that is on board or otherwise attached to the aircraft.
5. The operator is responsible for reviewing the published UASFM at http://udds-faa.opendata.arcgis.com/ prior to each flight to ensure that no changes have been made to the map, e.g., altitude changes, airspace modifications, etc. If the operator needs to operate at an altitude that is not in accordance with the published UASFM, the operator must apply for a new Certificate of Authorization requesting that altitude.
6. The groundspeed of the UAS may not exceed 87 knots (100 miles per hour).
7. The minimum flight visibility, as observed from the location of the control station must be no less than 3 statute miles. For purposes of this section, flight visibility means the average slant distance from the control station at which prominent unlighted objects may be seen and identified by day and prominent lighted objects may be seen and identified by night.
8. The minimum distance of the small unmanned aircraft from clouds must be no less than:
   a. 500 feet below the cloud.
   b. 2,000 feet horizontally from the cloud.
9. No person may act as a remote pilot in command or VO for more than one unmanned aircraft at one time unless otherwise authorized as a separate provision.
10. No operations from a moving vehicle or watercraft unless the operation is over a sparsely populated area and the PIC and VO are co-located.
11. Lost link must remain within visual line of sight of the PIC and VO.
12. The remote pilot in command may deviate from the requirements of this rule in response to an in-flight emergency.
13. Requests to operate in an area outside the approved operating area of this authorization should be limited to emergency/life threatening operations. Coordinate these flights through the Special Government Interest (SGI) process by calling the SOSC at (202) 267-8276, or email: 9-ATOR-HQ-SOSC@faa.gov.

C. **Notice to Air Missions (NOTAM).**

1. A Distant (D) NOTAM must be issued prior to conducting UAS operations not more than 72 hours in advance, but not less than 24 hours for UAS operations prior to the operation for routine operations. This requirement may be accomplished:
   a. Through the operator's local base operations or (D) NOTAM issuing authority, or
   b. By contacting the NOTAM Flight Service Station at 1-877-4-US-NTMS (1-877-487-6867). The issuing agency will require:

(1) Name and contact information of the pilot filing the (D) NOTAM request

(2) Location, altitude and operating area.

(3) Time and nature of the activity.

2. The area of operation defined in the (D) NOTAM must only be for the actual area to be flown for each day defined by a point and the minimum radius required to conduct the operation.

3. Operator must cancel (D) NOTAMs when UAS operations are completed or will not be conducted.

4. For first responders only. Due to the immediacy of some emergency management operations, the (D) NOTAM notification requirement may be issued as soon as practical before flight and if the issuance of a (D) NOTAM may endanger the safety of persons on the ground, it may be excluded. If the (D) NOTAM is not issued, the proponent must be prepared to provide justification to the FAA upon request.

D. **Reporting Requirements.**

1. Documentation of all operations associated with UAS activities is required regardless of the airspace in which the UAS operates.

2. The Proponent must submit the number of flights on a monthly basis through the COA Application Processing System (CAPS).

E. **Night small UAS Operations.**

Small UAS operations may be conducted at night, as defined in 14 CFR § 1.1, provided:

1. All operations under the approved COA must use one or more VOs;

2. Prior to conducting operations that are the subject of the COA, the PIC and VO must be trained to recognize and overcome visual illusions caused by darkness, and understand physiological conditions which may degrade night vision. This training must be documented and must be presented for inspection upon request from the Administrator or an authorized representative;

3. The sUA must be equipped with lighted anti-collision lighting visible from a distance of no less than 3 statute miles. The intensity of the anti-collision lighting may be reduced if, because of operating conditions, it would be in the interest of safety to do so. Additionally, in order to comply with § 91.209, the aircraft must have position lighting that enables determination of location altitude, attitude, and direction of flight.

F. **Minimum Safe Altitude Operations.**

A waiver from the requirements of 14 CFR 91.119(b) and (c) is approved as follows:

1. The ground speed of the small UAS must not exceed 100 mph/87 knots.

2. Except for those operations where it is necessary to safeguard human life, no person may operate a small unmanned aircraft over a human being unless that human being is:

a. Directly participating in the operation of the small unmanned aircraft; or

b. Located under a covered structure or inside a stationary vehicle that can provide reasonable protection from a falling small unmanned aircraft.

Note: People "directly participating in the operation of the small unmanned aircraft" may include qualified non-crewmembers, as defined in § 49 USC 40125.

3. For those operations where it is necessary to operate over a human being in order to safeguard human life, the remote pilot in command must not operate any lower or in proximity to human beings necessary to accomplish the operation.

G. **Special Use Airspace.**

1. Coordination and de-confliction between Military Training Routes (MTR) and Special Use Airspace (SUA) is the operator's responsibility. When identifying an operational area the operator must evaluate whether an MTR or SUA will be affected. In the event the UAS operational area overlaps an MTR or SUA, the operator will contact the scheduling agency as soon as practicable in advance to coordinate and de-conflict. Approval from the scheduling agency is required for regulatory SUA, but not for MTR's and non-regulatory SUA. If no response to coordination efforts, the operator must exercise extreme caution and remain vigilant of all MTRs and/ or non-regulatory SUAs.
2. Scheduling agencies for MTRs are listed in the Area Planning AP/1B Military Planning Routes North and South America. If unable to gain access to AP/1B contact the FAA at email address mail to: 9-AJV-115-UASOrganization@faa.gov with the IR/VR routes affected and the FAA will provide the scheduling agency information. Scheduling agencies for SUAs are listed in the FAA JO 7400.10.

AIR TRAFFIC CONTROL SPECIAL PROVISIONS

A. **Coordination Requirements.**

1. Unless otherwise directed the ATC contact phone numbers are as follows:
   a. ILM ATCT – 910-815-4676.
   b. ZDC ARTCC – 703-771-3470.
2. For operations in Class G airspace, or in accordance with UAS Facility Map (UASFM) altitudes within Class D and E airspace, the issuance of the (D) NOTAM will serve as notification to ATC. The Cancelling of the (D) NOTAM will serve as notification to ATC that operations are complete.
3. For emergency response operations in Class D and E airspace above UASFM altitudes, request a Special Government Interest (SGI) at (202) 267-8276, 9-ATOR-HQ-SOSC@faa.gov.
4. Pilot/operator must be accessible for direct real-time coordination purposes for the duration of UA operations. Direct real-time coordination information, to include primary and backup methods, as well as the name of the POC must be provided in the (D) NOTAM when filed.
5. ATC may delay, limit, prohibit or terminate UAS operations when the safety of manned aircraft operations is a concern.
6. Operations within 5 NM of airports with Class E Surface Areas with no UAS Facility Map (UASFM) must be coordinated with the ATC facility with jurisdiction over the operations area.
7. For operations within a 0.5 NM radius of non-controlled airports, heliports, or water landing areas notification must be made to the appropriate airport management.

8. If a review of NOTAMs during preflight actions reveals another proponent operating in all, or part of, the intended operating area, the proponent must de-conflict the intended operating area from the active operating area by contacting that proponent.

B. **Communication Requirements.**
1. When operations are in Class D and E airspace, the PIC must monitor the appropriate ATC frequency as assigned for situational awareness. However, ATC may require two-way frequency communications on a case-by-case basis.
2. For operations within 5 NM of any closed tower, non-towered airport, helipad or water landing area the PIC must monitor the appropriate UNICOM/CTAF frequency.
3. If direct two-way communication is not required, Air Traffic Control Special provisions will be used in lieu of maintaining direct two-way Communications.
4. The PIC will at all times have a telephone available as backup for communications with ATC.

C. **Procedural Requirements.**
1. This COA does not authorize flight within the NOTAM'ed military UAS flight restricted areas, authorized under CFR 14 Part 99.7 or in Temporary Flight Restriction (TFR) Airspace.
2. The proponent must be familiar with and comply with 18 U.S. Code § 795 – "Photographing and sketching defense installations".
3. Operations may be impacted, limited or denied in Class D and E airspace on a case-by-case basis.
4. For operations within Class D and E airspace, the maximum altitude of operations will be as indicated on the UASFM.
5. The UASFM may change over the life of this COA and it is the responsibility of the UAS Operator to maintain the most up to date version of those maps. The UASFM maps can be found at "https://udds-faa.opendata.arcgis.com/".
6. For coordination of operations above the altitudes indicated in the UASFM, contact Special Government Interest (SGI) at (202) 267-8276, 9-ATOR-HQ-SOSC@faa.gov.
7. When notified by ATC, the PIC must be able to terminate the operation within 2 minutes of notification.
8. It is the responsibility of the proponent to comply with all Federal, State and Local requirements when operating over publicly owned or controlled land and waterways (e.g. National Parks, National Seashore, etc…).

D. **UAS Operational Anomalies.**
1. Lost Link Procedures: ATC does not need to be notified provided the PIC complies with the following provisions:
   a. In the event that the data link is lost for at least three (3) seconds: The aircraft will execute the flight controller fail safe mode and climb to an altitude not exceeding the upper limits of the approved COA to attempt to re-establish Link.
   b. If link cannot be established for a period of 30 seconds:
      (1) The PIC must notify any ground assets that could be affected.

(2) The VO must be instructed to note bearing and approximate distance to commence recovery operations.
(3) The aircraft will fly back to the home point and land.

c. The UA will remain within the defined incident perimeter.
d. The UA will not interfere with the traffic pattern nor arrival/departure procedure of airports within the defined incident perimeter.
e. The PIC will notify the appropriate ATC facility within 15 minutes of the end of the flight.

2. Loss of Sight: If a VO loses sight of the UA, the PIC must be notified immediately. If the UA is visually reacquired promptly, the mission may continue. If not, the PIC must immediately terminate the operation and notify the appropriate ATC facility within 15 minutes of the end of the flight.
3. Loss of Communication between the PIC and VO: The PIC will execute lost link procedures. If communications are reestablished, the mission may resume. If communication cannot be promptly re-established, the flight must be terminated and the appropriate ATC facility notified no more than 15 minutes of the end of the flight.
4. Fly Away/Loss of Control: In the event of a fly-away, the PIC will immediately notify the ATC facility with jurisdiction over the operations area. The PIC will provide the following information:
   a. Altitude.
   b. Last known location.
   c. Direction of flight/heading.
   d. Fuel on board/Battery Time.
   e. PIC intentions.
   f. Termination of flight or emergency condition.

E. **Operations Area (See Attachments)**

AUTHORIZATION

This Certificate of Waiver or Authorization does not, in itself, waive any Title 14 Code of Federal Regulations not specifically stated, nor any state law or local ordinance. Should the proposed operation conflict with any state law or local ordinance, or require permission of local authorities or property owners, it is the responsibility of the proponent to resolve the matter. This COA does not authorize flight within Temporary Flight Restrictions, Special Flight Rule Areas, regulatory Special Use Airspace or the Washington DC Flight Restricted Zone (FRZ) without pre-approval. The proponent is hereby authorized to operate the small Unmanned Aircraft System in the NAS within the areas defined in the Operations Authorized section of the cover page.

Attachment 1

Operations Area
Class D, E and G Airspace
At or Below 400 Feet AGL in Class G Airspace and
In Accordance with UASFM Altitudes in Class D and E Airspace
Within the confines of New Hanover County, North Carolina